reality world on the display device when [a packet of] the further processed financial information is received; and

simulating movement through the virtual reality world on the display device such that the user, when viewing the display device, has a sensation of travelling through and within the virtual reality world.

**Remarks**

I. General

Claims 85-125 are pending in the above-identified application. Claims 85, 87, 92-94, 97-98, 102, 104, 106, 108, 115, 118, 121 and 123-125 have been amended. The specification has been amended to correct minor informalities. No new matter has been added. Applicant thanks the Examiner for the telephone interview in the above-identified application.

II. The Examiner's Rejections Under 35 U.S.C. § 103 Should Be Withdrawn

Claims 85-125 stand rejected under 35 U.S.C. § 103 as being unpatentable over Cyberarts: Lanier of VPL on "Voomies" by Rohrbough (the "Rohrbough article") and Virtual Reality: a status report by Jacobson (the "Jacobson article"), in further view of Virtual Reality offers growing opportunity for risk takers by Hindus (the "Hindus article"), Virtual Reality is almost real by Saffo (the "Saffo article"), PV-wave for Financial Applications ("PV-Wave 1"), PV-Wave Command Language ("PV-wave 2"), and PV-Wave Point and Click Visual Data Analysis Software ("PV-Wave 3").

Independent claim 85 recites a virtual reality generator having:

> an input module receiving the financial information from a financial data feed system, the financial data feed system generating the financial information as a function of predetermined financial analytics on real-time and pre-stored financial data; and
>
> a user interface module having a first input for selecting at least one financial category and a second input for selecting an axis

display parameter, the user interface module further processing the financial information as a function of the at least one financial category and the axis display parameter.

Similar limitations are recited in amended independent claims 104, 106, 118, 121 and 123-125.

As explained in the specification of the above-identified application, the virtual reality generator according to the present invention receives pre-processed financial information from a financial analytic system and then further processes the financial information as a function of a user-selected financial category and axis display parameter.

For example, the present invention receives pre-processed financial information from a conventional financial analytic system, such as the CAPRI financial analysis system, which provides, for example: price and volume charts for any stock issue; volatility; fundamental equity statistics; graphical profit and loss and risk evaluation; and time, bond, futures and other derivative analyses. See Specification at p. 9, line 15 to p. 10, line 15. The user then selects, via the user interface module, at least one financial category, such as financial instrument, industry group or country, for an axis of the three-dimensional world. See id. at p. 12, lines 3-17; p. 23, lines 7-24; p. 24, line 19 to p. 26, line 4. The user also selects an axis display parameter, such as percentage price change, average high/low price or price relative to a market index, to set the display of the z (vertical) axis of the three-dimensional world. Id. at p. 23, lines 26-34.

The user interface module further processes the financial information in accordance with the financial category and axis display parameter to generate the financial information virtual reality world according to the present invention. See id. at p. 16, lines 18-24; p. 18, lines 3-12; p. 26, lines 6-25; p. 26, line 36 to p. 27, line 11. As described in the specification, via the selection of the financial category and axis display parameter, the present

invention displays a hybrid of numerical financial information and categorical market geography. Id. at p. 7, line 28 to p. 8, line 6; p. 23, lines 7-24.

Applicant respectfully submits that the virtual reality generator recited in amended independent claim 85 is in no way taught or suggested by the references cited by the Examiner. Unlike any prior art system, including those cited by the Examiner, the present invention, as recited in claim 85, combines the pre-processed output of a conventional financial analytic system using real-time and pre-stored financial data with further processing, the further processing being defined by the user, to generate a virtual reality world which provides a financial decisional and analytical tool that is neither taught nor suggested by the prior art.

For example, the "field of wheat" hypothetical described in the Jacobson article nowhere describes the use of known financial analytic systems with a virtual reality generator, much less the further combination of an input module receiving financial real-time and pre-stored data with additional processing as a function of a user-selected financial category and axis display parameter, as recited in amended independent claim 85. Moreover, the field of wheat hypothetical fails to approach the magnitude of financial analysis available with the virtual reality generator recited in claim 85. Similarly, the Rohrbough article, which describes "turning a financial database into a giant simulated structure," also fails to describe anything even remotely similar to the user-defined processing of pre-processed financial information which is then displayed as a virtual reality world, as recited in claim 85.

Applicant respectfully asserts that the user interface module which provides for user-defined selection of a financial category, such as a financial instrument, country or industry group, and user-defined selection of an axis display parameter, such as volatility or price, and the subsequent processing of pre-processed financial information as a function of the financial category and axis display

parameter, to generate and display a virtual reality world according to the present invention, is clearly not taught or suggested by any virtual reality system described in the references cited by the Examiner. Therefore, Applicant respectfully submits that the references relied upon by the Examiner, either individually or in combination, including the combination of all six references relied upon by the Examiner, neither teach nor suggest the present invention as recited in independent claim 85. In addition, Applicant in no way admits that the references relied upon by the Examiner are prior art and Applicant reserves the right to swear back of the references.

As the Examiner is aware, it is the law of the Federal Circuit that to properly combine references, there must have been some teaching, suggestion or inference in the references, or knowledge generally available to one of ordinary skill in the art, that would lead to the combination of the relevant teachings. See Northern Telecom, Inc. v. Datapoint Corp., 908 F.2d 931, 934 (Fed. Cir. 1990). Applicant notes that the Examiner is maintaining an obviousness rejection relying on a combination of seven references, each of which must suggest or infer the combination with at least one other reference in order to be a proper rejection.

As set forth above, neither the Jacobson nor Rohrbough articles teach or suggest further processing pre-processed financial information as a function of a user-selected financial category and an axis display parameter, as recited in independent claim 85. The Examiner also relies, however, on the combination of the Rohrbough and Jacobson articles with five additional references in maintaining the rejection of claim 85, including three PV-Wave references.

The PV-Wave references describe PV-Wave as a business visualization program, which clearly falls in the standard 3-D graphical display realm. Nowhere do the PV-Wave references state that PV-Wave can produce a virtual reality world that enables a user to simulate movement through

financial information, as recited in claim 85.

The PV-Wave references also do not describe viewing or manipulating the graphs it creates using virtual reality hardware, such as a virtual reality headset or a dataglove. For example, the PV-Wave "Command Language" reference states that a user can "[n]avigate through your data using commands, menus or macros." Here, navigate is used not in the virtual reality sense (such as using a virtual reality headset to simulate traveling through a virtual reality world), but rather, as describing the use of standard graphical user interface features (with commands, menus and macros) to view different aspects of a data file.

In short, the PV-Wave program creates three-dimensional graphs, not "virtual reality worlds" that have geographical features such as terrains. The PV-Wave program does not provide virtual reality capabilities, as "virtual reality" is understood in the art or used in the specification of the present invention.

Accordingly, there is no suggestion or inference to combine the PV-Wave references with the purported teachings of the Jacobson and Rohrbough articles. Northern Telecom, 908 F.2d at 934. Furthermore, even combining the PV-Wave references with the Jacobson and Rohrbough articles do not teach or suggest, in any way, the financial information virtual reality generator recited in claim 85 as described above.

Therefore, Applicant respectfully submits that amended independent claims 104, 106, 118, 121 and 123-125 are also not taught or suggested by the references cited by the Examiner for the same reasons as claim 85.

As the dependent claims depend from and therefore include all of the limitations of the amended independent claims, Applicant respectfully submits that claims 86-103, 105, 107-117, 119-120 and 122 also are not taught or suggested by the references cited by the Examiner, either individually or in combination.

IV. Conclusion

The invention of claims 85-125 is new, non-obvious, and useful. Applicant respectfully requests reconsideration and allowance of claims 85-125.

Respectfully submitted,
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